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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|-------------|----------------------|---------------------|------------------|
| 10/809,466 | 03/26/2004 | Theodore Rappaport | 02560035BB | 7640 |

7590 04/07/2008
MOTOROLA, INC.
8000 West Sunrise Boulevard
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| EXAMINER |
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SAXENA, AKASH

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| ART UNIT | PAPER NUMBER |
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2128

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| MAIL DATE | DELIVERY MODE |
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04/07/2008

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

| | | | |
|------------------------------|--------------------------------------|-----------------------------------------|--|
| Office Action Summary | Application No. 10/809,466 | Applicant(s) RAPPAPORT ET AL. | |
| | Examiner AKASH SAXENA | Art Unit 2128 | |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 12 February 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 13-40 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 13-40 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 26 March 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. Claims 13-40 have been presented for examination based on the application filed on 12th February 2008.
2. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 12th February 2008 has been entered.
3. Claims 13 and 27 are amended.
4. Rejection to Claim(s) 13-40 under 35 USC § 112¶2nd is withdrawn in view of amendment.
5. Claim(s) 13-40 remain rejected under 35 USC § 103.
6. The arguments submitted by the applicant have been fully considered. Claims 13-40 remain rejected and this action is made NON-FINAL. The examiner's response is as follows.

Response to Remarks for Claim Rejections - 35 USC § 103

7. Examiner has performed an updated review of the cited art, applicant's arguments and updated the rejection in view of the amendment.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148

USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

- 8. Claims 13-16, 18-19, 21-30, 31-33 and 35-40 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 5,337,149 issued to Kozah et al (Kozah hereafter), in view of U.S. Patent No. 6,509,906 issued to Awe et al (Awe hereafter).**

Regarding Claim 13 (Updated 3/26/08)

Kozah teaches a computer implemented method for creating or manipulating one or more drawings representing a physical environment (Kozah: Abstract, Fig.1; Col.2 Lines 62-66), method comprising:

Kozah teaches step a) using a computer for creating, formatting, and editing one or more objects based on pre-existing data stored within the computer (Kozah: Col.8 Lines 34-55 window element stored in a CAD program on a computer), the one or more objects (Kozah: Col.8 Lines 56-61 - adding one or more elements as objects) defining an environment in which an in-building (Kozah: Fig.1; Col.2 Lines 62-66; Col.4 Lines 10-12; Col.3 Lines 26-40; Col.11 Lines 16-22), said environment having at least one of floors, walls, partitions, buildings, building complexes or compounds, terrain, foliage, or other sites or obstructions (Kozah: Col.7 Lines 1-2 Lines 55-65; Col. 8 Lines 50-50 – for manipulating different objects) as acquiring measurements of environment having various features and then labeling the features with capability to edit features afterwards.

Kozah does not teach step b) grouping a number of said one or more objects into at least one editable layer.

Kozah teaches step c) *verifying, using a computer, the sufficiency of said one or more objects to ensure a useful definition of said environment (Kozah: Col.5 Lines 11-14) and notifying a user of results of said verification of sufficiency (Kozah: Fig.9 Col.8 Lines 34-55);*

Kozah does not explicitly teaches the step d) *generating at least one formatted drawing or at least one set of formatted data containing computer representations of said one or more objects in a form transportable to and usable by a communications engineering or network management application; although Kozah teaches storing the object/position information in the CAD database in CAD application (Kozah: Col.9 Lines 13-31).*

Kozah partially teaches step e) *rendering a three-dimensional view of said environment (Kozah: Abstract; Col.4 Lines 1-12).*

Kozah does not explicitly teach amended step e) *rendering a three-dimensional (3-D) view of said environment by simultaneously converting the grouping of one or more objects from the at least one editable layer into 3-D obstructions within the 3-D view.*

Awe teaches step b) *grouping a number of said one or more objects into at least one editable layer (Awe: Fig.8 Element 806; Col.7 Line 16-20; Col.4 Lines 45-61) as groups the display representation.*

Awe also teaches d) automatically *generating at least one formatted drawing or at least one set of formatted data containing computer representations of said grouping of one or more objects in a form transportable to and usable by a*

communications engineering or network management application (Awe: Fig.8 Col.3 Lines 18-60) as data stored in a storage device associated with a CAD program.

Awe teaches amended step e) rendering a three-dimensional (3-D) view of said environment (Awe: Fig.3 & 8 and associated text) by simultaneously converting the grouping of one or more objects from the at least one editable layer into 3-D obstructions within the 3-D view (Awe: Fig.5 and Fig.3 & 8 and associated text; Col.4 Lines 45-61 – grouping for perception as 3D; Col.4 Lines 64-Col.7 Line 29 showing grouping and conversion from primitives).

It would have been obvious to one (e.g. a designer) of ordinary skill in the art at the time the invention was made to apply the teachings of Awe to Kozah to create a three dimensional representation of the building data. The motivation to combine would have been that Kozah gathers the information and build the three dimensional model but does not disclose the details of how the measurements are mapped to the primitive objects (Kozah: Col.7 Lines 55-65; Awe: Col.1 Line 62-Col.2 Line 6) to create a three dimensional view of the building, a deficiency cured by Awe by using streams (Col.5 Line 16-Col.6 Line 42) for a custom 3D view.

Regarding Claim 14

Kozah teaches comprising the step of adding or editing at least one object in said at least one editable layer or in said at least one formatted drawing or in at least one set of formatted data (Kozah: Col.11 Lines 16-22; Awe: Col.5 Lines 54-63).

Regarding Claim 15

Art Unit: 2128

Awe with Kozah teaches the step of moving at least one object in said at least one editable layer or in said at least one formatted drawing or in at least one set of formatted data (Awe: Col.4 Line 64-Col.5 Line 15 – changing the display representation – Col. Col.4 Lines 34-37 - eg. door swing/movement; Kozah: Col.8 Lines 16-19).

Regarding Claim 16

Awe teaches the step of modifying at least one object in said at least one editable layer or in said at least one formatted drawing or in at least one set of formatted data (Awe: Col.5 Lines 54-63).

Regarding Claim 18

Kozah teaches that step a) includes the step of tracing and adding a traced object to said one or more objects or one set of formatted data (Kozah: Col.2 Lines 37-50).

Regarding Claim 19

Kozah teaches step a) includes the step of modifying one or more objects or one of electrical properties, physical properties, aesthetic properties, or spatial configurations of one or more objects (Kozah: Col.1 Lines 50-52, Col.2 Lines 43-48, Col.3 Lines 15-18).

Regarding Claim 21

Kozah teaches notifying performed in said verifying and notifying step is performed by prompting the user (Kozah: Col.7 Lines 61-65) and, when required to provide said useful definition (Kozah: Col.8 Lines 20-23), requires the user to correct any

insufficiencies in response to an insufficiency notification (Kozah: Col.8 Lines 45-55; Fig.9).

Regarding Claim 22

Kozah teaches said communications engineering or network management application is selected from the group consisting of wireless propagation models, measurement tools, component placement or layout visualization tools, optimization tools, bill of materials generating tools, asset management tools, and network performance management or prediction tools (Kozah: Col.10 Lines 26-40).

Regarding Claim 23

Kozah teaches scaling at least part of said at least one formatted drawing or said at least one set of formatted data or at least one object of said one or more objects as sizing the drawing (Kozah: Abstract).

Regarding Claim 24

Kozah teaches step of adding measurement data to said at least one of said one or more objects or said at least one formatted drawing or said at least one set of formatted data (Kozah: Fig.7 steps 7.06-7.12).

Regarding Claim 25

Awe teaches the step of specifying or invoking a propagation model for performing predictions of performance (Awe: Fig.1-2, Col.5 Lines 19-25).

Regarding Claim 26

Awe teaches the step of specifying or invoking a listing of communications equipment (Awe: Col.3 Lines 41-50).

Regarding Claims 27-30 (Updated 3/26/08)

Apparatus claims 27-30 respectively disclose similar limitations as claims 13-16 and are rejected for the same reasons as claim 13-16 respectively. Kozah & Awe both disclose apparatus implementations (Kozah: Fig1, Awe: Fig.1).

Amended claim 27 is rejected similarly as claim 13. Means for rendering and grouping as pointed out by applicant in specification [0080]-[0083], and specifically [0081], is commercially available software AUTOCAD in which elements can be grouped in layers and rendered together. Awe teaches rendering plan view (2-D) grouped objects as 3-D (Awe: Fig.3 & 5).

Regarding Claim 32-33

Apparatus claims 32-33 respectively disclose similar limitations as claims 18-19 and are rejected for the same reasons as claim 18-19 respectively. Kozah & Awe both disclose apparatus implementations (Kozah: Fig1, Awe: Fig.1).

Regarding Claim 35-40

Apparatus claims 35-40 respectively disclose similar limitations as claims 21-26 and are rejected for the same reasons as claim 21-26 respectively. Kozah & Awe both disclose apparatus implementations (Kozah: Fig1, Awe: Fig.1).

- 9. Claims 17, 20, 31 and 34 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 5,337,149 issued to Kozah et al (Kozah hereafter), in view of U.S. Patent No. 6,509,906 issued to Awe et al (Awe hereafter), further in view of U.S. Patent No. 5091869 issued to Ingram et al (Ingram hereafter).**

Regarding Claim 17

Teachings of Awe with Kozah are shown in claim 13 rejection above.

Awe with Kozah do not teach explicitly step of removing extraneous objects from said one or more objects or from said at least one formatted drawing or in from at least one set of formatted data.

Ingram teaches step of removing extraneous objects from said one or more objects or from said at least one formatted drawing or in from at least one set of formatted data (Ingram: Col.12 Lines 21-23).

It would have been obvious to one (e.g. a designer) of ordinary skill in the art at the time the invention was made to apply the teachings of Ingram to Kozah & Awe to electronically collect floor plan based information. The motivation to combine would have been that one skilled in the art and Kozah are aware of Ingram's teachings (Kozah: Background) and would use Ingram to increase the accuracy of measurements taken to eliminate deficiencies.

Regarding Claim 20

Ingram teaches notifying performed in said verifying and notifying step is performed in an automatic fashion without feedback being provided to the user (Ingram: Col.5 Lines 44-48).

Regarding Claim 31 and 34

Apparatus claims 31 and 34 respectively disclose similar limitations as claims 17 and 20 and are rejected for the same reasons as claim 17 and 20 respectively.

Kozah, Awe and Ingram, all disclose apparatus implementations (Kozah: Fig1, Awe: Fig.1, Ingram: Fig.4).

Conclusion

10. All claims are rejected.

Communication

Any inquiry concerning this communication or earlier communications from the examiner should be directed to AKASH SAXENA whose telephone number is (571)272-8351. The examiner can normally be reached on 9:30 - 6:00 PM M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kamini S. Shah can be reached on (571)272-2279. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Akash Saxena/
Examiner, Art Unit 2128

/Hugh Jones/

Primary Examiner, Art Unit 2128